

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number  
**WO 2005/061489 A1**

(51) International Patent Classification<sup>7</sup>: **C07D 413/04**,  
413/06, 413/12, A61K 31/4245

**THOMAS, Gerard Hugh** [GB/GB]; Windrush Court,  
Watlington Road, Oxford Oxfordshire OX46LT (GB).

(21) International Application Number:  
PCT/GB2004/050046

(74) Agent: **BLAKEY, Alison**; Windrush Court, Watlington  
Road, Oxford Oxfordshire OX46LT (GB).

(22) International Filing Date:  
23 December 2004 (23.12.2004)

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/532,370 24 December 2003 (24.12.2003) US

(71) Applicant (*for all designated States except US*): **PROSID-  
ION LIMITED** [GB/GB]; Windrush Court, Watlington  
Road, Oxford Oxfordshire OX46LT (GB).

(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **FYFE, Matthew**  
[GB/GB]; Windrush Court, Watlington Road, Oxford  
Oxfordshire OX46LT (GB). **GARDNER, Lisa** [GB/GB];  
Windrush Court, Watlington Road, Oxford Oxfordshire  
OX46LT (GB). **KING-UNDERWOOD, John** [GB/GB];  
Windrush Court, Watlington Road, Oxford Oxfordshire  
OX46LT (GB). **PROCTER, Martin** [GB/GB]; Windrush  
Court, Watlington Road, Oxford Oxfordshire OX46LT  
(GB). **RASAMISON, Chrystelle** [FR/GB]; Windrush  
Court, Watlington Road, Oxford Oxfordshire OX46LT  
(GB). **SCHOFIELD, Karen** [GB/GB]; Windrush Court,  
Watlington Road, Oxford Oxfordshire OX46LT (GB).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: HETEROCYCLIC DERIVATIVES AS GPCR RECEPTOR AGONISTS

(57) Abstract: Compounds of Formula (I), R<sup>1</sup>-A-V-B-R<sup>2</sup>; or pharmaceutically acceptable salts thereof, are agonists of GPR116 and are useful as regulators of satiety, e.g. for the treatment of obesity, and for the treatment of diabetes.

WO 2005/061489 A1